

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(12) UK Patent Application (19) GB (11) 2 205 734 A (13)

(43) Application published 21 Dec 1988

(21) Application No 8714223

(22) Date of filing 17 Jun 1987

(71) Applicant
Mitchell Projects Limited
(Incorporated in United Kingdom)

31 Maes Cadnant, Caernarfon, Gwynedd, LL55 1BS

(72) Inventor
Howard Mitchell

(74) Agent and/or Address for Service
Roystons
Tower Building, Water Street, Liverpool, L3 1BA

(51) INT CL^{*}
A47J 43/18 A22C 17/02 B26D 3/18 7/01

(52) Domestic classification (Edition J):
A4C 117 US
U1S 1081 1291 A4C

(56) Documents cited
EP A2 0120170 US 4604771

(58) Field of search
A4C
A4A
A4D
A2B
Selected US specifications from IPC sub-classes
A47J B26D A22C

(54) Kebab preparation

(57) An apparatus for use in preparing and cooking kebabs comprises four side walls 3, 5, 7, 9 which are firmly interconnected to define a tube member and into which a first end wall 29 is slidably received to further reinforce the shape formed by the side walls and whose end position is determined by engagement with lips 33 projecting inwardly from the side walls 3, 5, 7, 9.

Said side walls are apertured longitudinally for receiving a knife to cut food within the tube member, whilst a further end wall 31 is also slidably received in the tube member and retained by locating means (39, 43 Figs. 1, 2). The end walls are apertured to receive skewers forming the spines for the kebabs.

By making the apparatus from a suitable plastics material the kebabs can be cooked in a microwave. The tube member is conveniently rested on its side on a drip tray (45 Fig. 3) for cooking.

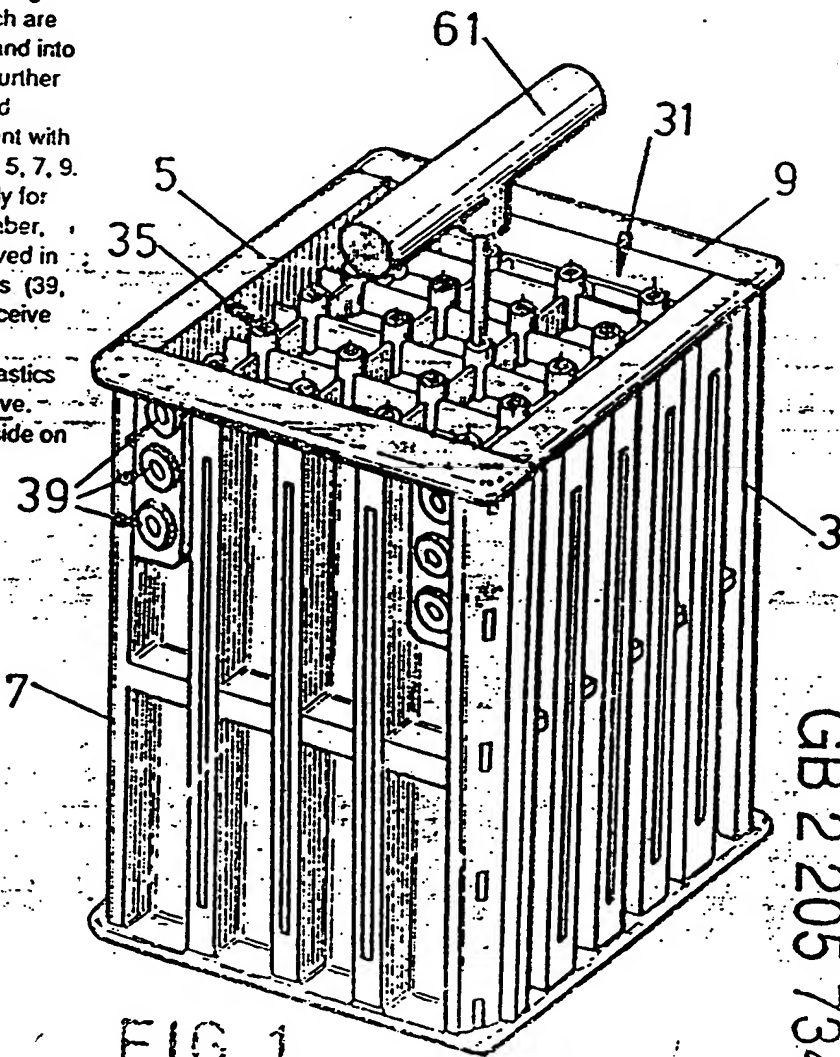
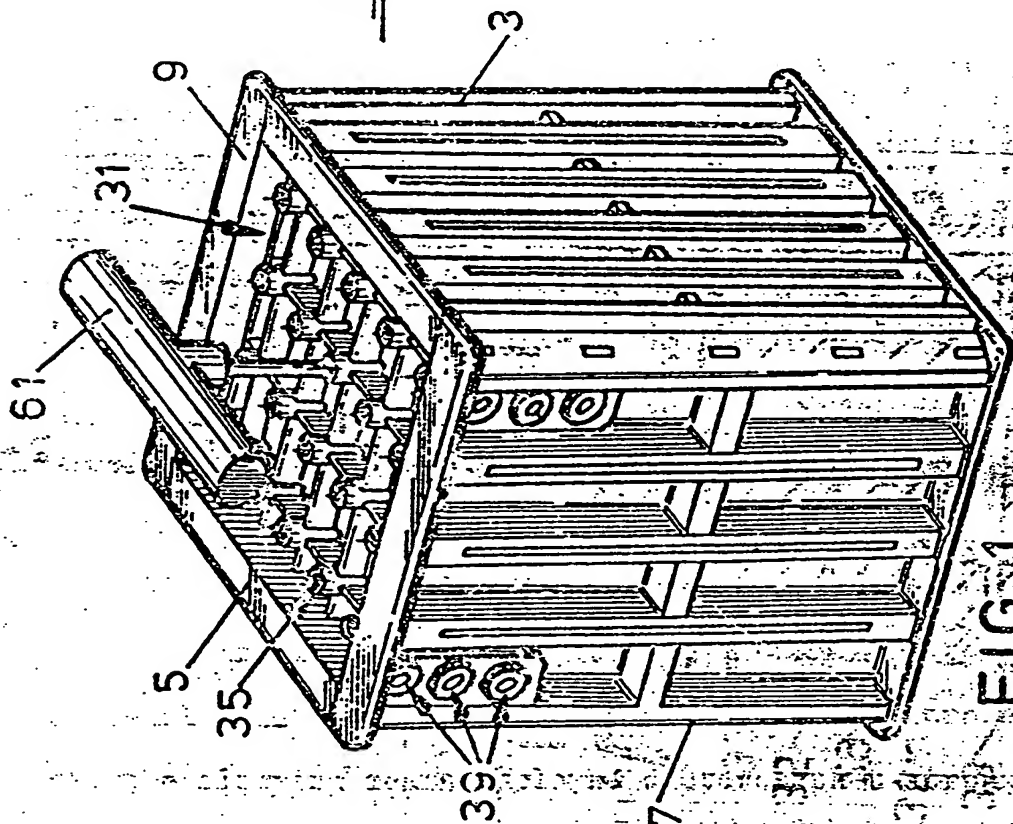
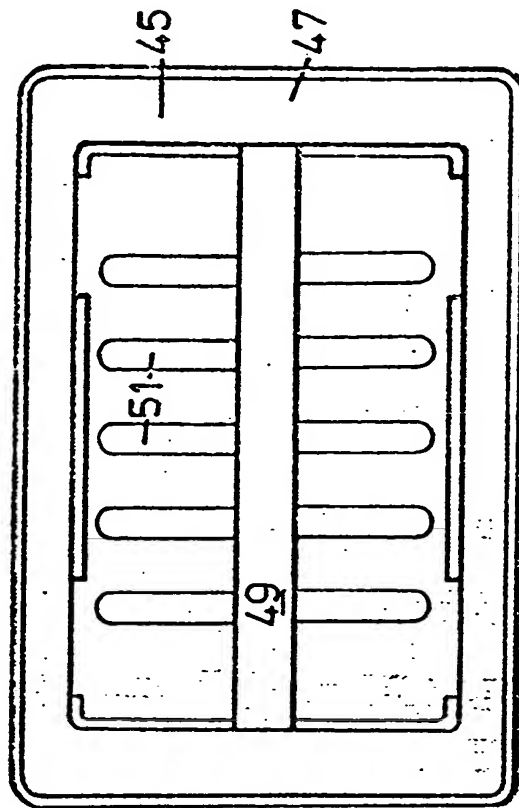
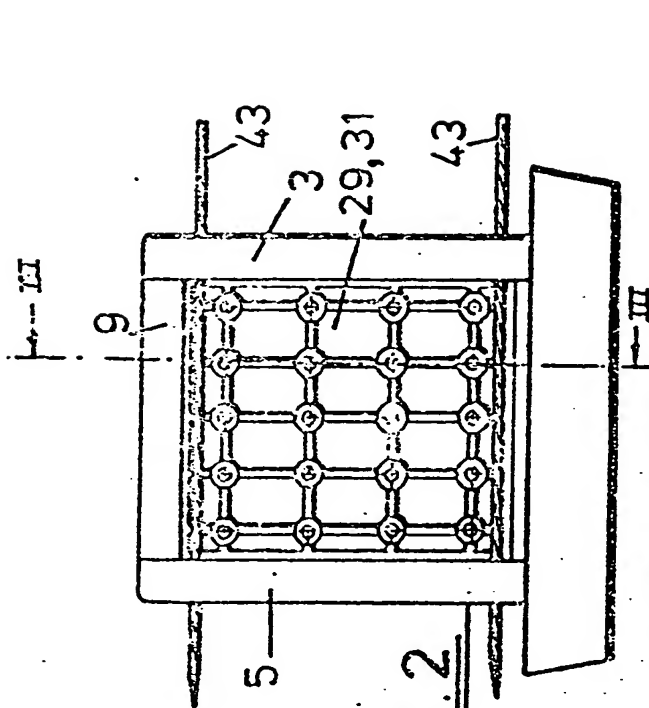


FIG. 1

GB 2 205 734





2-2

2305734

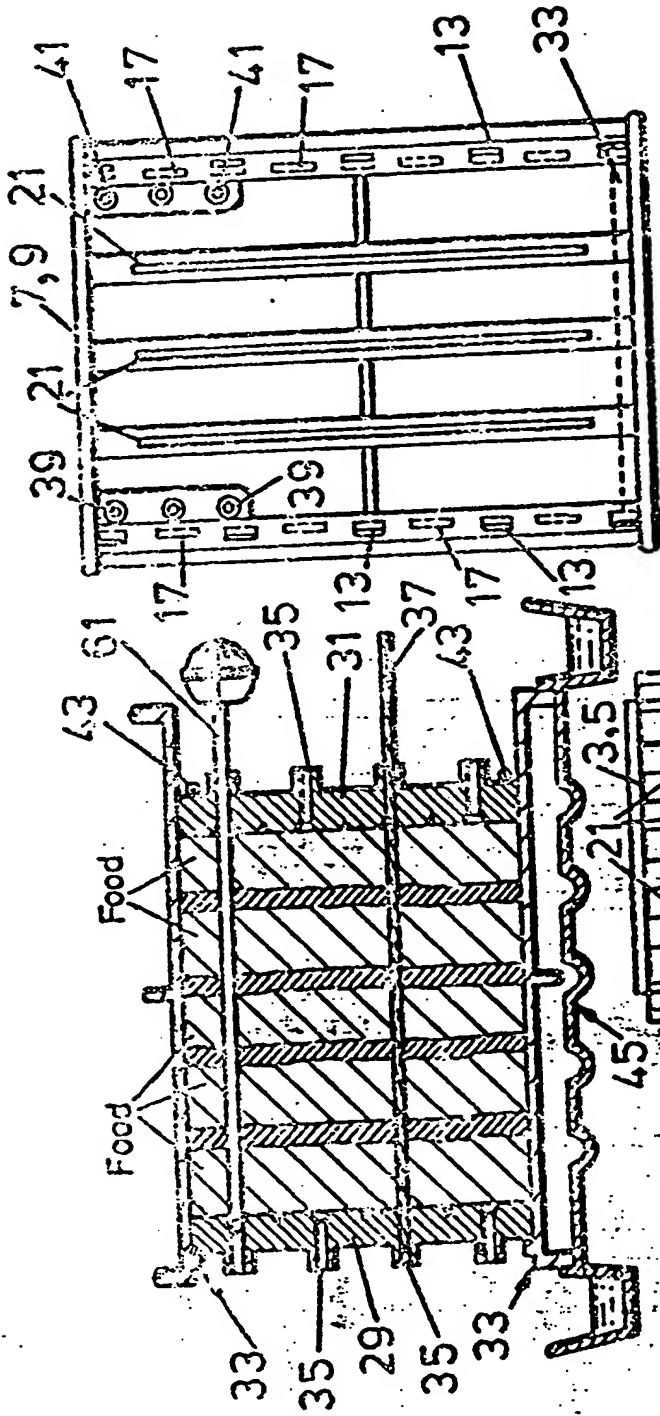


FIG. 3

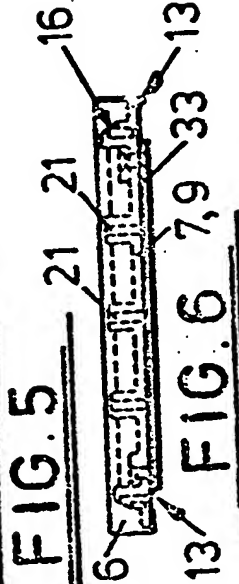


FIG. 5

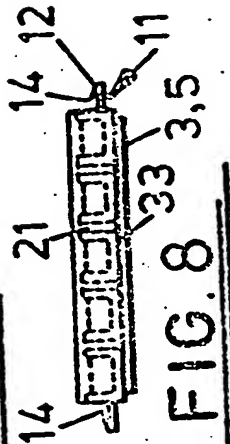


FIG. 6

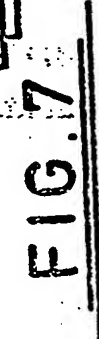


FIG. 7

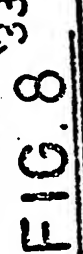


FIG. 8

Kebab Preparation

The present invention relates to the preparation and cooking of kebabs and more especially to apparatus for use in preparing and/or cooking kebabs, which apparatus has particular but not exclusive application in the domestic field and for use in microwave cookery.

Apparatus is known in the catering trade for preparing kebabs. It comprises a food chamber defined by four side walls which are slotted so that a knife can be run through food in the well in planes at 90 degrees to one another to form desired cubes of food on skewers first inserted through the food and located in apertures of end plates. One end plate serves as a base on which the side walls are supported and to which they have to be securely fixed using a clamp like catch, whilst the other fits into the well on top of the food and is held down by a screw type clamping device which itself has a frame which grips around upper edges of two opposite side walls. The side walls are hinged together. The parts are of metal construction.

The known apparatus has the disadvantage that being of metal construction it cannot be used in a microwave, yet the clamping means employed dictates that strong materials be used. Nevertheless the means employed to

secure the side walls to the end walls is complex and adds to the expense of construction.

The present invention aims to provide a more economic construction which is readily suited to use in a microwave and to the domestic market.

Accordingly the present invention provides apparatus for use in preparing and cooking kebabs comprising a tube member and an end wall which is at least substantially accommodated within the tube member and with which it is co-operable to determine its end position.

The tube member may be of any convenient section and formed in one piece or in parts. In fact we prefer the tube member to be made up of four interconnectable side walls and preferably with right angle corners to define a hollow square section or rectangular section depending on relative sizes of opposite side walls.

A particularly convenient and advantageous construction results where adjacent side walls have co-operating male and female coupling parts such as hooked male parts and recesses therefor. More especially we prefer to have one pair of opposite side walls with male parts projecting from opposite edges thereof and to have one pair of opposite side walls provided with reception means for the male parts along opposite edges. This is convenient for ensuring correct positioning of opposite walls on assembly.

Further male/female locating parts can be advantageously provided along edges of adjacent walls with male and female parts being on the same or other of said pairs of walls relative to said coupling parts.

- 5 The aforescribed hooked coupling means works particularly well when the materials employed enjoy some resistance. This is the case with plastics material and many plastics are suitable for microwave use.

- 10 Using plastics is advantageous from the weight point of view and by using moulding techniques, components of the desired complex shape can be made easily and reliably. The walls of the tube member are provided with longitudinal slots usually in pairs diametrically opposed or otherwise
15 opposite one another for passage there through of a knife for use in cutting the food. The slots can be in longitudinal reinforcing ribs. At least two pairs of slots are provided in different planes, usually at right angles to one another.

- 20 In the preferred embodiment having four interconnected side walls we envisage different sizes catering for making a prescribed number of kebabs by having pairs of opposite side walls accommodating a desired number of complimentary slots. For example, a minimum might be two slots in said one opposite pair of walls, and three
25 slots in the other opposite pair of walls - for making

fifteen kebabs. Said one opposite pairs of walls may in the alternative have three slots for 20 kebabs or four slots for 25 kebabs. Where a greater number of kebabs is required the number of slots may be increased correspondingly.

Said end wall according to a preferred construction is arranged to be received slidably within the tube member and stop means is provided to determine its end position. Said stop means conveniently comprises inwardly extending lip means on the walls of the tube member against which the end wall abuts when pushed into the tube member from its other end. Alternatively the end wall may carry lug means engageable with a shoulder and recess in the wall of the cylindrical member. It is further envisaged that the side walls could be clipped together around the end wall when positioned to be received in such a recess.

Using the aforescribed interconnectable side walls imparts good rigidity to the tube member, whilst having the end wall(s) received slidably therein further enhances the rigidity even though the parts themselves are made of plastic. Moulding the side walls allows reinforcing lips to be incorporated with further advantages as regards rigidity whilst keeping weight to the minimum.

In addition to said one end wall it is also preferred to have an opposite end wall which is slidably received

within the tube member and which, in use, rests above food contained in the member. This end is conveniently held in place by location means which in a preferred form comprises elongate members extending between
5 opposite side walls which are apertured to receive said members. Several sets of apertures may be provided at different distances from the said end wall for use depending on the quantity of food in the chamber.

Said end walls are provided with holes for passage
10 there through and support of skewers. One hole is provided for each kebab which can be made which is of course determined by the number of slots in the opposite side walls.

A further advantageous arrangement results with the
15 provision of a tray on which the aforescribed apparatus can be placed when cooking. We find it particularly convenient to have the skewers horizontal during cooking as this most suits the proportion of microwaves, thus the apparatus is turned on its side and arranged to be
20 located on said tray with engagement legs being provided for this purpose. More particularly said tray has grooving for collecting and channelling liquid exuded during cooking into a collecting trough.

By making all the aforementioned parts from plastic
25 and using wooden skewers there is provided apparatus

which is suited to use in a microwave.

The present invention will now be described further, by way of example only, with reference to the accompanying drawings; in which:-

5 Figure 1 is a perspective view of apparatus according to the invention;

Figure 2 is an end view of the apparatus with drip tray;

10 Figure 3 is a sectional view on line III-III of Figure 2;

Figure 4 is a plan view of the drip tray;

Figures 5 and 6 are respectively an elevation and plan view of one side wall; and

15 Figures 7 and 8 are respectively an elevation and plan view of co-operating side wall.

Referring now to the drawings, there is shown a hollow tubular body 1 made up of four wall sections 3, 5, 7, 9 conveniently of plastics, such as PEX with each wall section coupled to an adjacent wall section along mating edges for which purpose two opposite wall sections 3, 5 have sideways projecting members 11 with hooked ends 12 presenting shoulders 14 parallel to the edges of the walls. The members 11 fit into co-operating recesses 13 provided on opposite sections 7, 9 with the shoulders of the hooks engaging faces 16 when pushed home; said

25

faces being in a parallel plane to said walls 7, 9.
Further locating lugs 15 of the wall sections 3, 5 are
spaced along the edges intermediate said hooks for
co-operation with complimentary openings 17 in the
5 edges of side wall sections 7, 9.

The side wall sections have one or more
longitudinal slots 21 and in the illustrated example
four slots in one opposite pair of sides 3, 5 and three
slots in the other opposite pair of sides 7, 9. This
10 serves to form 20 kebabs as described hereinafter.

We prefer to standardise on the sides 3, 5 having
four slots whilst alternative versions of the other
sides 7, 9 are available with two, three or four slots
so making up units for 15, 20 or 25 kebabs.

15 Also provided are opposite end walls 29, 31 which
are dimensioned to be received as a sliding fit within
the wall sections of the tube member. As will be seen
the lower edge of the wall sections each carry a lip 33
against which one end section 29 abuts in its function
20 as a base during cutting as described further hereinafter.
The end plates have a plurality of through bores 35,
regularly spaced and of a number corresponding to the
number of kebabs which can be made with any particular
size of unit and hence giving the number of slots in the
25 side walls, thus different sizes of end wall are provided

for the different sizes of tube member. The bores 35 serve as guides and support for skewers 37 (usually wooden for use in microwave), with the bores in the opposite ends 29, 31 being in alignment.

5 Also illustrated in the wall section 7, 9 are three pairs of through bores 39, 41 displaced one above the other as illustrated in Figure 5. These receive elongate rods 43 - which conveniently comprise skewers extending between opposite walls and serving to hold the
10 end 31 in position.

A further feature of the invention is a drip tray 45 being generally dish like with peripheral trough 47 fed from longitudinal channel 49 into which lead transverse channels 51. Upstanding leg portions 53
15 are dimensioned to serve as locating means for the tube member when turned on its side - see Figure 3. The tray is of plastics material suitable for use in a microwave.

20 It is intended that four wall sections of desired configuration be assembled together by interengagement of the side couplings and once assembled would normally remain assembled although resilience of the hook means could allow dismantling if necessary. As it is the tube member is firmly held in shape when the wall sections are
25 interconnected. An end wall 29 is then slid into the

tube member and pushed into engagement with the lips 33 to determine its end position. With the end wall lowermost serving as a base the food can then be placed within the tube member which defines a food well. I.e. layers of meat, onions, peppers etc as desired, and then the other end 31 slipped into the open end, over the meat, and skewers inserted through the holes 39, 41 to pass outwardly of the end 31 and hold it within the tube.

A metal spike as illustrated at 61 is then inserted in turn through each of the bores 35 in the upper end plate and pushed down parallel to the side walls to exit the aligned bore 35 in the bottom end wall. On removal of the spike a wooden or plastic skewer is put in its place. This is repeated until all the bores are fitted with skewers to form the basis (spine) for each kebab to be formed.

A knife is then inserted into one of the slots 21 in say wall 3 and pushed through the food and into the corresponding aligned slot 21 in the opposite wall 5.

The knife may then be run down the slots towards the end 29 thus slicing through the food in the food chamber.

Conveniently, the end wall(s) have V grooves for receiving the knife. The operation is repeated for each of the slots in side walls 3, 5 and then for the slots in the side walls 7, 9 thus forming cuts in a plane at 90

degrees to the first. The food is thereby cubed and retained on the skewers.

The apparatus with raw kebabs therein may now if desired be placed in a microwave for complete or partial cooking, and this is preferably done by turning the apparatus on its side and placing it on the drip tray into which juices from the food collect during cooking.

Of course it is not essential to cook using a microwave and once the kebabs have been prepared in the efficient manner made possible by the present apparatus, the end may be removed and the kebabs taken out and cooked in any desired conventional manner.

By making all the parts of the apparatus from a material which can be used in a microwave, such as PTFE plastic a particularly convenient construction results.

By having the wall members rigidly coupleable together and providing an end wall serving as a base which takes its abutment within the tube member provides a simple but effective construction.

CLAIMS

1. Apparatus for use in preparing and/or cooking kebabs comprising a tube member and an end wall which is at least substantially accommodated within the tube member and with which it is co-operable to determine its end position.
2. Apparatus as claimed in claim 1 in which the tube member is made up of four interconnectible side walls.
3. Apparatus as claimed in claim 1 or 2 in which adjacent side walls have co-operating male and female parts.
4. Apparatus as claimed in claim 3 in which at least some male parts have hooked ends for co-operating engagement inrecessed abutments.
5. Apparatus as claimed in claim 3 or 4 in which one pair of opposite side walls have said male parts projecting from opposite edges, and the other pair of opposite side walls have reception means for the male parts.
6. Apparatus as claimed in any one of claims 2 to 5 in which opposite walls have corresponding numbers of longitudinal slots.
7. Apparatus as claimed in claim 6 in which two, three or four longitudinal slots are provided, with adjacent walls having the same or different number of slots.
8. Apparatus as claimed in any one of the preceeding

claims in which said end wall is received slidably within the tube member and stop means is provided to determine its end position.

9. Apparatus as claimed in claim 8 in which the stop means comprises a lip extending into the tube member.

10. Apparatus as claimed in any one of the preceeding claims comprising a further end wall which is slidably received within the tubular member.

11. Apparatus as claimed in claim 10 in which said further end wall is held in place by location means.

12. Apparatus as claimed in claim 11 in which the location means comprises one or more elongate rods each receivable in aligned apertures in the tubular member and extending therebetween to co-operate with said further end wall.

13. Apparatus as claimed in claim 12 when appendent to claim 2 or any claim appendent thereon in which several pairs of apertures are provided longitudinally spaced in one opposite pair of side walls.

14. Apparatus as claimed in any one of claims 1 to 5 in which the tubular member has longitudinal slots for receiving a knife and arranged to allow cutting in at least two planes.

15. Apparatus as claimed in any one of the preceeding claims further comprising a drip tray on which the tube member is locatable with its longitudinal axis parallel thereto.

16. Apparatus as claimed in any one of the preceeding claims when made of a microwavable material.
17. Apparatus constructed and arranged substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.